

## WHAT IS CLAIMED IS:

1. In a method for treating cytological or histological specimens in an automatic stainer, the specimens being delivered on object carriers and in object carrier magazines  
5 by means of a transport device to various processing stations, inserted therein, and treated in accordance with a definable treatment program, and said transport device being capable, during execution of said treatment program, of moving further objects or object carriers to other processing stations so that a parallel processing or treatment is possible in various processing stations, the improvement comprising the step of:  
10 executing an optimized automatic program sequence according to which identically operating processing stations are defined as backup stations and are correspondingly utilized if a required processing station is occupied.
2. The improvement as defined in Claim 1, wherein said program sequence takes into  
15 account a priority list of identically operating processing stations as backup stations.
3. The improvement as defined in Claim 2, wherein said priority list for backup stations is definable by the user.
- 20 4. The method as defined in Claim 2, wherein said priority list for backup stations is selectable as a defined program sequence.
5. The method as defined in Claim 2, wherein said priority list is calculated in consideration of defined parameters.  
25
6. The method as defined in Claim 5, wherein the calculation of the priority list is accomplished in consideration of shortest paths.

7. The method as defined in Claim 5, wherein the calculation of the priority list is accomplished in consideration of shortest transport times.
8. The method as defined in Claim 5, wherein the calculation of the priority list is  
5 accomplished in consideration of current reagent fill levels in said processing stations.
9. The method as defined in Claim 8, wherein said priority list is calculated so as to achieve approximately the same reagent fill levels among said processing stations.